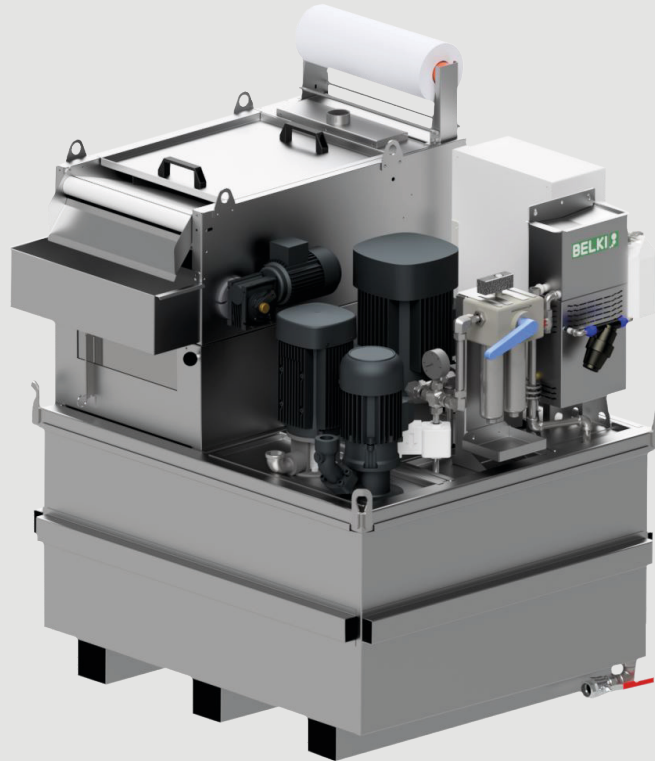


BELKI Filter System (BFA)



Application

The BELKI filter system BFA150 is used to filter coolant lubricants from machining processes. The filter system can be configured and equipped with a magnetic filter, high-pressure pumps, an oil separator and a chiller as required.

Operation

In its basic configuration, the filter system consists of a BELKI deep bed band belt filter and an emulsion tank with a volume of 920 liters. From this, the system can be configured with pumps, magnetic filters, etc., according to the customer's requirements. The pumps are activated via the machine's control system, from which the pressure setting of the screw pumps can also be controlled continuously. In addition to the basic equipment, extensions are possible such as oil separators, chiller and magnetic filters, which are very effective in the machining of cast iron.

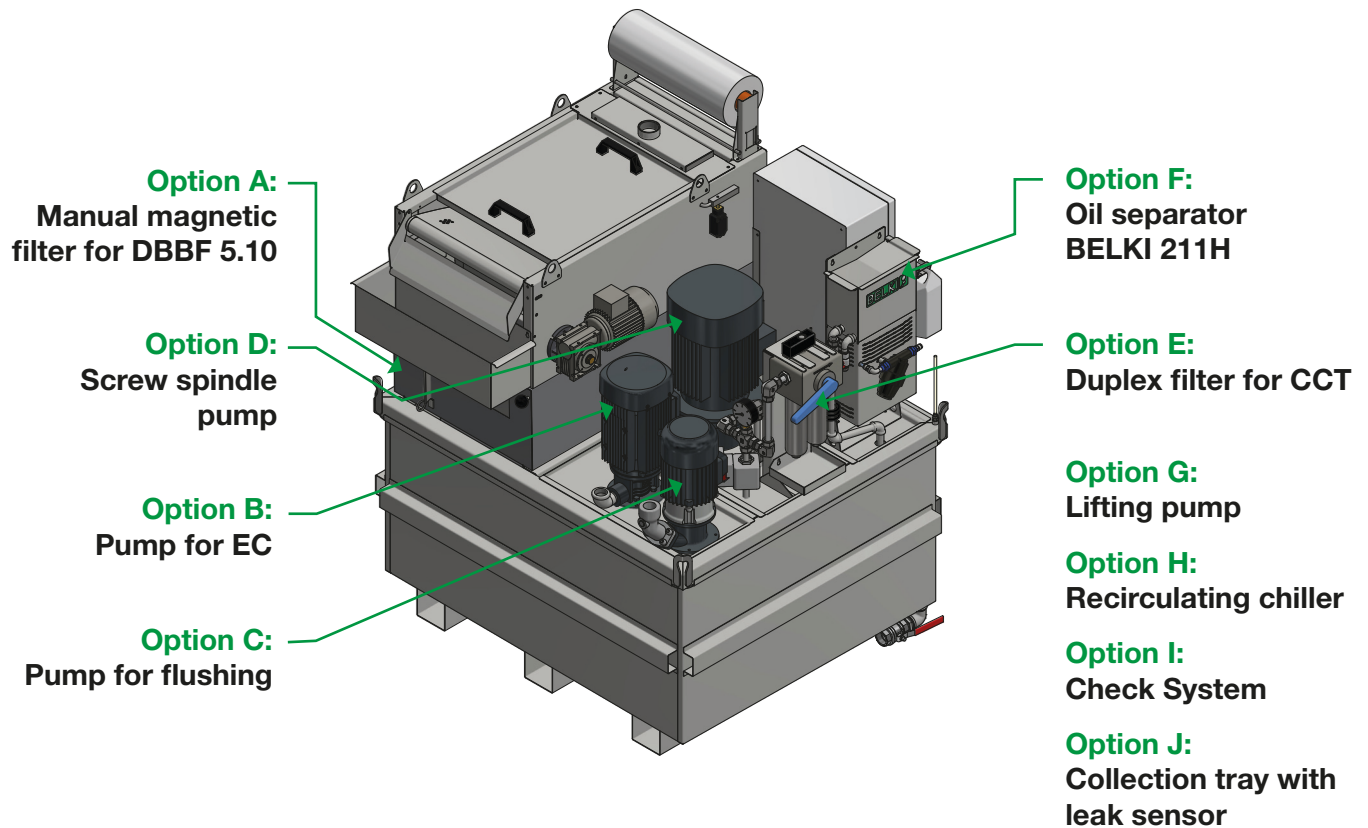
Advantages

Continuous filtration of the coolant lubricant offers a wide range of advantages in terms of quality, reliability and working environment. A BELKI filter system is modular and can be adapted to the customer's needs. It is also possible to retrofit equipment if the requirements change in the course of the machine's operating time, or if changes occur in the production process. The filter system is designed in such a way that all filters, pumps etc. are mounted on a steel frame with lifting eyes. In this way, all components can be lifted off and reassembled, for example with a crane. Neither pipes nor cabling have to be separated. This makes the cleaning of the filter system easier.

Basic configuration and options for BFA 150

Basic configuration:

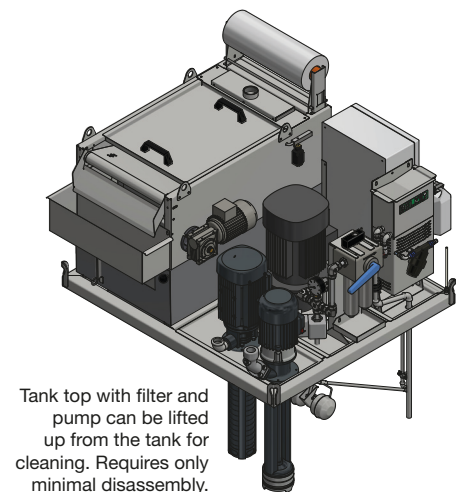
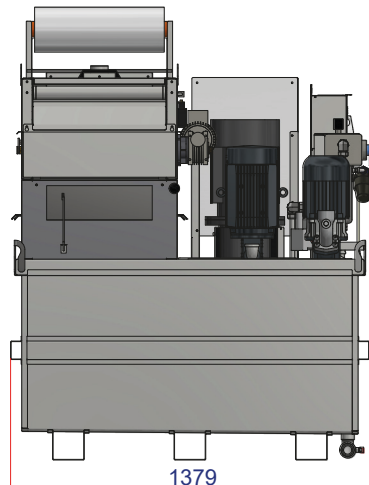
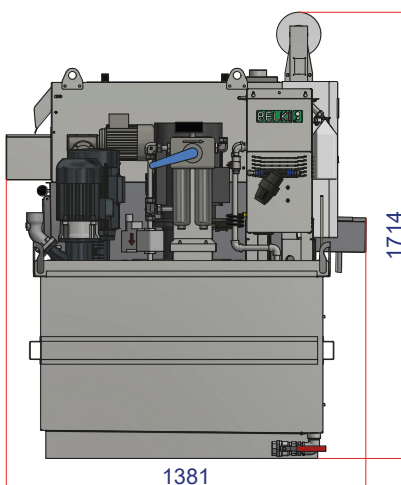
Deep bed band filter 5.10, tank 920 l, paper guard clean side, level switch 04 og 08, control box



Technical specifications

Type	Capacity (max l/min)	Filter surface (m ²)	Filtration degree (µm)	Acidity (pH)	Temperature (°C)
BFA150	150	0,35	20-80	5-10	20-60

Type	Connection (V/Hz)	Material	Length (mm)	Width (mm)	Height (mm)
BFA150	3x400/50	EN1.4301	1379	1381	1714



Configuration options

BELKI Filteranlage 150 Standard/grundkonfiguration

BFA150: Deep bed band filter 5.10, tank 920 l, paper guard clean side, level switch 04 og 08, control box.

Option A: Manuel magnetic filter for DBBF 5.10

A1: Manuel magnetic filter for deep bed band filter 5.10.

Option B: Pump for external cooling (EC)

B1: Pumpe for EC. Grundfos MTR5-18/18. 87 l/min @ 10 bar, 5 m hose 1 1/4", pump 3 kW

B2: Pumpe for EC. Grundfos MTR5-8/18. 87 l/min @ 4 bar, 5 m hose 1 1/4", pump 1,1 kW

B3: Pumpe for EC. Grundfos MTR3-36/36. 50 l/min @ 18 bar, 5 m hose 1 1/4", pump 3 kW

Option C: Pump for flushing

C1: Pumpe for flushing. Brinkmann STE143/620. 120 l/min @ 2,5 bar, 5 m hose 1 1/4", pump 1,7 kW

C2: Pumpe for flushing. Miksan EP252/490. 125 l/min @ 1,5 bar, 5 m hose 1 1/4", pump 1,1 kW

Option D: Screw spindle pump for cooling through the tool (CTT)

D1: Screw spindle pump for CTT. Grundfos MTS 20-40 R38.
25 l/min @ 40 bar, 3 kW, incl. adjustable valve SPB-H-15

D2: Screw spindle pump for CTT. Grundfos MTS 20-60 R46.
30 l/min @ 70 bar, 5,5 kW, incl. adjustable valve SPB-H-15

D3: Screw spindle pump for CTT. Grundfos MTS 20-80 R46.
29 l/min @ 81 bar, 7,5 kW, incl. adjustable valve SPB-H-15

Option E: Duplex filter for cooling through the tool (CTT)

E1: Duplex filter for CTT. PI3730+PI1030 25 micron police filter

Option F: Oil separator BELKI 211H

F1: Oil separator BELKI 211H

Option G: Lifting pump

G1: Lifting pump Miksan EP252/250.

Immersion depth 250 mm, incl. level switch 07, pump cover

G2: Lifting pump Miksan EP252/320.

Immersion depth 320 mm, incl. level switch 07, pump cover

G3: Lifting pump Miksan EP252/400.

Immersion depth 400 mm, incl. level switch 07, pump cover

G4: Lifting pump Miksan EP252/490.

Immersion depth 490 mm, incl. level switch 07, pump cover

Option H: Recirculating chiller

H1: Recirculating chiller for emulsion. Hyfra Alpha 9 kW for emulsion,
incl. 10 m 1½" hose, 715 x 715 x 1554 [mm]

H2: Recirculating chiller for oil. Hyfra Alpha 9 kW for oil, incl. 10 m 1½" hose

Option I: Check System

I1: Check System, incl. concentration measurement and adjustment, top-up,
water consumption and temperature logging

I2: Check system I1 extended with pH measurement and logging

Option J: Collection tray with leak sensor

J1: Collection tray with leak sensor.

Tank and leak sensor IFM LMC400

BFA150 **A** **B** **C** **D** **E** **F** **G** **H** **I** **J** **Order key for filter system BFA150**

If an option is not required, enter a "0" after the letter.
For example, "F0" (means that an oil separator is not required).

BELKI's product range

Equipment for separation and filtration of industrial process fluids

The BELKI product range is wide and is constantly being expanded with new, efficient products, all made of stainless steel. Our filtration equipment is an important factor in extending the lifetime of process fluids and thereby protect the environment from unnecessary pollution. Our standard products for filtration and separation of process fluids are among others:



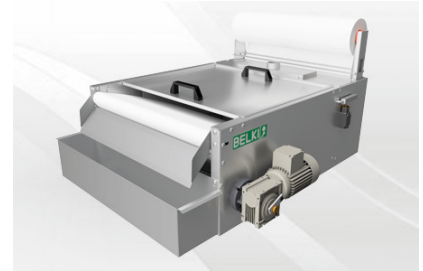
BELKI Smart Unit

The mobile combination of deep bed band filter, oil separation and magnetic fine filtration.



Oil Separator

Separation of tramp oil from various process fluids such as washing fluids, degreasing fluids and coolant lubricants.



Deep Bed Band Filter

For filtering grinding fluids, cooling lubricants and degreasing agents from machining machines and central systems.



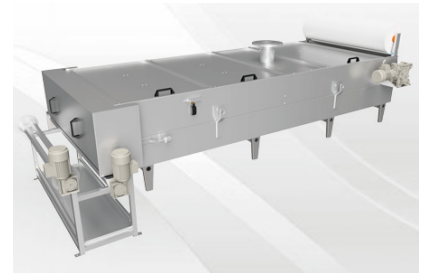
Magnetic Filter

For magnetic fine filtration of process fluids containing, for example, particles from cast iron machining or grinding.



Inline Magnetic Filter (Ultra Mag)

For magnetic fine filtration of solids and ferritic particles from process fluids in the cutting industry.



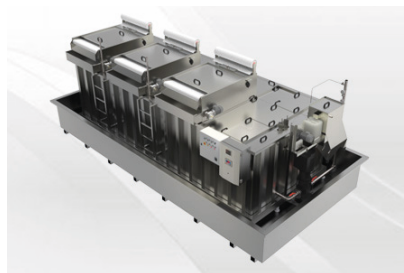
Paper Belt Filter

A simple and reliable filter for filtering process fluids.



BELKI Check System

Automatic measurement and adjustment of the concentration of coolant concentration in the emulsion.



Central System

Customized by-pass or full-flow central systems, which are modularly constructed from our products range and contain several filtration stages.



Hydro Cyclones

For separation of abrasive fluids.

Gain an insight into the world of BELKI

View BELKI's full product range at www.belki-filtration.com and stay up to date by following our LinkedIn profile, where we regularly post news, photos and videos of our products.

Presented by / Überreicht durch:



Filtration with capacity